

## ABSTRACT OF THE DISCLOSURE

The present invention relates to the field of apparatus and methods which provide the rapid generation of structure/activity relationships using auto-deconvoluting combinatorial libraries, which facilitate the invention of novel active compounds. The invention provides apparatus and methods which can be used for the rapid generation of structure/activity relationship (SAR) data, and, therefore, the characterisation of the active motif of any group of compounds. The invention provides libraries of compounds which interact with an active moiety, and apparatus and methods to identify such compounds. The active moieties may be (but are not limited to) enzymes, receptors, antibodies, etc. The interaction of the active moiety with the compounds of the library may be (but is not limited to) the interaction of a substrate or inhibitor with an enzyme, the interaction of a ligand with a receptor, the interaction of an antigen or antigenic epitope with an antibody, etc.